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THE CENTER FOR RESEARCH AND LEADERSHIP DEVELOPMENT IN VOCATIONAL AND TECHNICAL EDUCATION, OCTOBER 16, 1967 THROUGH JANUARY 15, 1968. PROGRESS REPORT.

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ACTIVITIES OF THE CENTER FOR THE QUARTER INCLUDED CONTINUED WORK ON 14 CENTER RESEARCH AND DEVELOPMENT PROJECTS AND ON TWO ADDITIONAL RESEARCH PROJECTS AND A RESEARCH TRAINING PROGRAM FUNDED BY SPECIAL CONTRACTS. LEADERSHIP DEVELOPMENT ACTIVITIES INCLUDED A 2-DAY MEETING FOR STATE PERSONNEL ON INFORMATION ACCESSIBILITY, FOUR RESEARCH TRAINING SESSIONS, AND CONTINUATION OF WORK RELATED TO THE FOUR TECHNICAL INSTITUTES HELD IN THE SUMMER OF 1967. PROPOSALS WERE SUBMITTED FOR AN INSTITUTE IN PROGRAMING-PLANNING-BUDGETING SYSTEMS, TWO INSTITUTES IN LEADERSHIP DEVELOPMENT IN TECHNICAL EDUCATION, AND A PROPOSAL FOR "DEVELOPMENT OF PERFORMANCE GOALS FOR A NEW OFFICE AND BUSINESS EDUCATION LEARNINGS SYSTEM." THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) CLEARINGHOUSE RECEIVED 963 DOCUMENTS AND COMPLETELY ABSTRACTED AND INDEXED 447 OF WHICH 200 WERE SENT TO ERIC. ALSO REPORTED IS INFORMATION ABOUT STAFFING AND STAFF DEVELOPMENT, THE RESEARCH LIBRARY, THE ADVISORY COMMITTEE MEETING, CENTER CONTRIBUTIONS TO ACTIVITIES OF OTHER GROUPS, LEADERSHIP ROLES OF CENTER STAFF AT THE AMERICAN VOCATIONAL ASSOCIATION MEETING, AND EXPANSION OF CENTER FACILITIES. THE APPENDIXES INCLUDE (1) A LIST OF CENTER PUBLICATIONS, (2) A ROSTER OF ADVISORY COMMITTEES AND PANELS, (3) INFORMATION RELATING TO THE NATIONAL INVITATIONAL RESEARCH DISSEMINATION WORKSHOP AND THE ERIC INFORMATION SEMINAR, (4) LISTS OF CONTRIBUTORS TO CENTER ACTIVITIES, CONSULTING SPECIALISTS, AND INSTITUTIONAL PARTICIPANTS, AND (5) LISTS OF ARTICLES, PAPERS, AND PRESENTATIONS OF CENTER STAFF MEMBERS. (JK)

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THE CENTER FOR RESEARCH AND LEADERSHIP DEVELOPMENT IN VOCATIONAL AND TECHNICAL EDUCATION

The Ohio State University

October 16, 1967, through January 15, 1968

U. S. DEPARTMENT OF
HEALTH, EDUCATION AND WELFARE

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Robert E. Taylor

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The Center for Vocational and Technical Education
The Ohio State University

Columbus, Ohio

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PROGRESS REPORT

ON

THE CENTER FOR RESEARCH AND LEADERSHIP DEVELOPMENT
IN VOCATIONAL AND TECHNICAL EDUCATION

October 16, 1967, through January 15, 1968

Introduction

This publication reports the activities of The Center for Vocational and Technical Education at The Ohio State University during the first quarter of the second year of its five-year contract, October 16, 1967, through January 15, 1968. During this period progress has continued in ongoing projects, new projects have been started, and plans have been laid for activities to be undertaken in the coming months.

Staffing

A major shift in staffing occurred during the quarter with the appointment of Dr. A. J. Miller, Center Specialist in Technical Education, as Coordinator of Development and Training. This constitutes the third appointment of a coordinator and completes the staffing at this level. The three coordinators are: Dr. Miller; Dr. Edward J. Morrison, Coordinator of Research; and Mrs. Celianna I. Wilson, Coordinator of Information Services. Dr. Miller will continue on a part-time basis in technical education until a replacement can be secured.

Arrangements have been made during the quarter for interviews in labor economics and technical education. Further contacts have been made in the area of health occupations. Other positions approved in The Center proposal include industrial arts, educational media, and dissemination. We are not able to recruit in these areas until such time as our funding level is increased to the authorized level.

Dr. Richard H. Wilson, Associate Professor of Agricultural Education, The Ohio State University, assumed a part-time position at The Center giving leadership to the newly funded project, "A Planning Study to Determine the Feasibility of a Research Project Concerning Employment Opportunities and Training Needs in Farming and Off-farm Agricultural Business and Industry."

Dr. Mary Margaret Brady, Professor of Business Education, Southern Illinois University (Edwardsville campus) is spending her sabbatical leave here to develop a taxonomy of office activities in connection with "A Planning Study to Determine the Feasibility of Developing a New Business and Office Education Curriculum."

Research and Development Projects

Development of a Model to Evaluate State Programs of Vocational and Technical Education (Project 20)

The purpose of this project is to develop and field test an evaluation system for use by states in assessing their programs of vocational and technical education as a basis for program planning and development. The system is intended to support a state's assessment of its total occupational education and training effort in terms of national and state interests, student benefits, and manpower requirements.

Center staff, together with jointly-employed evaluation specialists from New Jersey, Kentucky, and Colorado, constitute the project team which has primary responsibility for system development. In addition, several advisory committees, individuals representing many disciplines both within and outside of education, and specialists from The Center have been repeatedly involved in the project and provide continuing guidance and assistance. The project team, in cooperation with its advisors, is responsible for developing a set of state vocational education program goals; for designing a model system for self-initiated evaluation of state programs; for structuring the data systems and formulating procedures needed by state staffs to effect the evaluation; for conducting a tryout of the system in three state departments and revising the system as necessary; and for disseminating the results of the project through training seminars for state department personnel from all interested states.

The preliminary set of goals was distributed to a selected national sample. Returns were evaluated and a final set of goals was produced. The state directors advisory committee reviewed preliminary data materials and offered constructive suggestions concerning specific program objectives and areas of concern which they thought ought to be included within the data system. A major effort was initiated toward completing the structure of the data system. To date, data to be structured for Goals 1 through 4 have been completed. The data to measure the remaining goals are to be completed during the early part of next quarter. Pilot state coordinators reviewed initial efforts on the data system to date and will meet during the next quarter to agree upon those materials to be actually utilized during the initial stage of the field testing.

During the next quarter, the pilot states will be visited by the project staff to orient each state concerning the need for total state staff involvement to assist their coordinator and to indicate their role in the validation procedures which follow data collection. Field testing will begin in the pilot states during the next quarter. Progress reports will be forwarded to the project's two advisory committees.

State Department of Education Leadership in Vocational Education: A Study of Its Current Status, Projected Needs, Evolving Role, and Recommendations for a Training Program (Project 21)

The major purpose of this project is to develop and test programs and materials designed to train people for leadership of vocational-technical education in state departments of education. Activities were organized into three partially concurrent phases.

Phase I was an empirical investigation into the problems of attracting and retaining qualified personnel in state divisions of vocational education. Data were obtained from three types of respondents. In structured interviews, state directors of vocational education and head state supervisors in 31 states provided data on the training, experience, and numbers of present leaders, on the personnel policies and practices affecting them, and on the problems of attracting and retaining qualified personnel. A specially designed questionnaire was used to obtain estimates from 125 field supervisors of vocational education (called "assistant state supervisor" or "consultant" in some states) of the experience and training needs for leadership positions. All U. S. Office of Education regions were represented in this sample of supervisors.

A second, special questionnaire was used to gather data from 130 qualified leaders, who had left state department positions in vocational education during the past five years, as to the reasons such personnel leave and where they go. Data collection activities were coordinated with The Center for Occupational Education (North Carolina State University) and with the Program for Research and Development in Vocational-Technical Education (University of California, Berkeley).

Phase II was directed to description of the future role of state departments of education and their divisions of vocational-technical education. A group of eight social scientists was commissioned to prepare background papers describing those forces and trends within society which influence state departments to change and to help identify specific implications of the forces described for both vocational and general education. These background papers and a set of three papers synthesizing their implications were the basis for three days of intense discussion at a conference of the social scientists and educational practitioners convened to consider the role emerging for state departments of education and divisions of vocational-technical education. A report on Phase II, (Rice, D. C. and Toth, P. E., (Eds.). The Emerging Role of State Education Departments with Specific Implications for Divisions of Vocational-Technical Education), presents all of the prepared papers and summarizes conclusions concerning the emerging role reached as a result of the conference.

Phase IIIa, will develop guides for pre-service and in-service educational programs designed to teach the new capabilities required for leadership in the new roles emerging for state education department divisions of vocational education. Preparations for the initiation of the project have been

completed during the quarter. The functions of state leadership personnel are being identified through an investigation of state plans of vocational education and a review of research and literature in the area of supervision and state educational administration. Plans are underway for an investigation of Phase I and II, as well as other pertinent sources, to identify training needs. These needs along with the functions of leadership personnel will be used to outline training objectives. Work on Phase IIIa during the quarter beginning January 15, 1968, will be concentrated on identifying training needs and objectives and selecting content from related disciplines.

The purpose of Phase IIIb of project 21 is to develop and test simulation materials to be used:

(1) to prepare practicing and prospective state leadership personnel in state divisions of vocational education to understand and to cope more effectively with the emergent state leadership role; and
(2) to provide state vocational education division leadership personnel with special opportunities to understand and resolve emergent problems now confronting them.

During the past quarter, a state was selected to cooperate in the project. Data concerning the department milieu were collected, with initial drafts of two documents prepared containing realistic descriptions of state history, commerce, government, law, educational system, etc.

A general conceptual framework for the project has been developed.

Initial discussions have been held with host state staffs, and a committee of consultants has been selected to help identify specific critical incidents for simulation.

During the next quarter we will develop a sample set of materials based on critical incidents enlisted from state staff personnel. The incidents will illustrate problems in human relations, decision making and communications, encountered by assistant state supervisors of vocational education as they perform the functions of instructional evaluation, curriculum development, and in-service education. The advisory group of state staff personnel will meet on January 31, 1968 to discuss the project, offer suggestions and learn about the critical incident technique and simulation materials. The group will meet again March 6, 1968 to assemble additional critical incidents they have accumulated in the interim. These incidents will then be categorized according to the conceptual framework of the study. Also during this quarter the critical incidents will be edited and used for the construction of draft simulation materials.

Phase IIIc will develop and test a program of training in the techniques and concepts of planning, programming, and budgeting systems (PPBS). Initial planning for this phase has begun. Useful discussions of course content and of possible cooperative activities have been conducted with

representatives of appropriate divisions of the U. S. Office of Education such as the Division of Vocational and Technical Education. The quarter beginning October 15, 1967, was primarily devoted to (1) a review of potential materials for inclusion in the PPBS training package, (2) development and submission of a training proposal to USOE for a PPBS institute scheduled for October, 1968, and (3) identification of potential participants, faculty, and facilities for the proposed institute.

The Problems and Meanings of Occupational Goal Development of Disadvantaged Junior High School Students (Project 23)

This exploratory study was designed to investigate the vocational maturity of junior high school students and their perceptions of school, work, family, peers and self as these are related to personal characteristics of the students (e.g., grade, sex, academic achievement) and to selected characteristics of their schools and communities. One "disadvantaged" and one "non-disadvantaged" school was selected in each of four communities located in different geographical regions (Appalachia, South, Eastern Seaboard, West). Seventh and ninth grade students (total sample about 2400) in each of the eight selected schools completed the Attitude Scale of Crites' Vocational Development Inventory and a specially designed Student Perception Inventory. Teachers completed a brief open-end questionnaire on their perceptions of disadvantaged students. Various other data also were assembled on characteristics of the schools, the communities, and the students.

The results for disadvantaged and for non-disadvantaged were summarized. During this quarter the data were coded and analysis procedures were initiated. Data analysis will be completed in the next quarter after which preparations will begin for publication of a final report.

A National Survey of the Training and Functions of Guidance Counselors in Vocational Education (Project 24)

In response to the recommendations of the 1966 National Seminar on Guidance for Vocational Education sponsored by The Center, this study was designed to produce a description of the present status of vocational guidance, to provide "bench mark" data on important aspects of guidance programs with which future status assessments might be compared, and to identify some programmatic guidelines to improve vocational guidance. This survey was more comprehensive than previous surveys since it included a national sample of guidance programs, examined all major types of secondary schools, and collected data from all types of key individuals.

Approximately 6,500 administrators, counselors, teachers, students, and parents from 439 high schools (including both rural and urban academic and comprehensive schools, as well as urban vocational and area vocational schools), distributed through all U.S.O.E. regions of the country, responded to questionnaires designed for this study. Although a special questionnaire was designed for each type of respondent, a number of items were common to all questionnaires so that responses of different types of respondents could be compared. Results were tabulated and analyzed with respect to: the roles and functions of guidance counselors; services provided by the guidance programs; training of counselors; student-counselor ratios; students' unmet guidance needs; the differences and similarities of reports and assessments by different types of respondents; and the differences between types of schools. Recommendations for improvement of guidance programs also were developed.

During this quarter the data analysis was completed and a preliminary report of findings was prepared for distribution at an invitational conference. The conference was held December 20-21, 1967 in Washington, D.C. attended by 10 experts representing vocational education, industrial education, guidance, and pupil personnel services to discuss the preliminary survey findings as they pertain to future project planning. Their role was to serve as a panel to (1) review survey findings and conclusions; (2) identify implications for guidance program planning; and (3) identify future guidance research and program priorities.

Work on this project will be completed with publication of the final report (Campbell, R. E.) Vocational Guidance in Secondary Education: Results of a National Survey.) now in press.

The Modification of the
Perceptions Held by Disadvantaged
Youth Toward Office Work
(Project 29)

The purposes of this study are (1) to develop and test an educational program designed to modify perceptions held by disadvantaged youth regarding office work so they may become successful office workers, and (2) to develop methods and materials for preparing office education teachers to work with disadvantaged youth. It was planned that specially developed scales of perceptions of office work would be administered to disadvantaged students, non-disadvantaged students, and office workers with less than three years of experience. Results would be used to develop a preliminary program and materials for disadvantaged students and a program of teacher training. The two programs and their materials then would be field-tested, revised and, finally, made available to interested teachers and teacher educators in summer institutes and Center publications.

A scale for use with urban students was developed, tried out, and revised with the consultation of sociologists, psychologists, teachers already working with disadvantaged students, and a measurement specialist.

The instrument was then administered in eight cities and usable returns were obtained from 568 tenth graders in disadvantaged schools, from 575 tenth graders in non-disadvantaged schools, and from 155 beginning office workers. Center staff, Hunter College staff, and 27 teachers (from 14 states) who planned to participate in tryout of the educational program, used the results from the scale administration as part of the basis for development of preliminary methods and materials during a five-week workshop in July and August, 1967. The workshop also served as an experimental training program for these teachers of disadvantaged students. Materials developed in the workshop then were refined and developed further by a special task force of project staff, teachers, and consultants before being delivered to tryout schools for preliminary evaluation during the 1967-68 school year. An interim report (Huffman, H. BOOST: Business Office Occupations Student Training) on the work completed to date is in press.

During this past quarter arrangements were made to hold three workshops during the summer of 1968 for teacher educators, state supervisors, city supervisors, and others who have the responsibility of preparing and supervising teachers of disadvantaged youth. The workshops will be held at Hunter College of The City University of New York, San Francisco State College, and Temple University. Each institution will produce a publication containing activities developed by the participants to prepare office education teachers of the disadvantaged. Planning activities for conducting the workshops will continue during the coming quarter.

During the coming quarter data will be collected from teachers in Laredo, Philadelphia, and Detroit who are trying out, according to a predetermined plan, the methods and materials contained in the BOOST publication. A second perception scale, which has been developed in cooperation with personnel at Colorado State University to assess the perceptions which rural students have with respect to office work, has been administered to students and office workers. Data collected by this instrument will be analyzed during the next quarter. The results from this administration and from the current field-tests of programs and materials will be used in later quarters to revise and expand the preliminary packages prior to additional testing and eventual dissemination.

Implications of Women's Work Patterns for Program Development in Vocational and Technical Education (Project 30)

This project was intended to derive implications for vocational and technical education and guidance programs from the employment patterns of American women, as revealed by existing demographic data, and from the occupational and educational plans and the work attitudes of girls not yet in the labor force.

A report of the first part of the project (Lee, S. L. et al, Implications of Women's Work Patterns for Vocational and Technical Education) on women's participation in the labor force and the conclusions reached by a work conference and a companion bibliography (Lee, S. L. et al. Implications of Women's Work Patterns for Vocational and Technical Education: An Annotated Bibliography) were distributed to teacher educators, state supervisors, selected local directors and other appropriate persons.

In the second phase of the project, a questionnaire to identify the occupational plans, educational plans, work attitudes, and significant correlates of these plans and attitudes of high school senior girls was developed and cleared through USOE. Correlates which will be examined include: knowledge of the world of work; employment experience; non-vocational educational experiences planned; mother's work experience; and occupation, education, and earning aspirations. Family income level and place of residence (Metropolitan-nonmetropolitan) will be included by the selection of the sample for the major study. Type of school (comprehensive, general-academic, vocational-technical) has been included as a variable in the selection of the sample for the major study. Consideration of the attitudes of "significant others" has been dropped due to question format except for a few items in the attitudes toward work scale.

Approximately half of the pilot data have been collected and arrangements made for collection of the remaining half. Systematic review of relevant literature continued, both for materials related to attitudes and plans and for materials related to the development of a curriculum unit on women's work patterns. Selection of schools for the major sample of the project continued.

During the coming quarter, collection of the pilot data will be completed and the data will be analyzed. Factor analysis will be carried out with the attitude toward work items, an item analysis will be done on the knowledge of the world of work items, and the demographic items will be submitted to a frequency count. Further analysis will be carried out as indicated by the preliminary analysis outlined. The questionnaire will then be revised on the basis of the analysis. Schools initially identified for the major sample will be contacted and data collection arrangements made. Collection of data will be initiated. Work on the introductory and methodological chapters of the research report and on the curriculum unit will be continued. Preliminary plans for analysis of the data from the major study will be prepared.

Experimental Attempts to Improve the Adjustment of Vocational Trainees to Supervision (Project 34)

The general purpose of this project is to determine whether maladjusted employees can be trained to respond more adequately to their supervisors. The present research is designed to test the hypothesis

that maladjusted vocational trainees will be rated by their training supervisors as responding more favorably to supervision after training than before training. Training consists of five sessions, each 60 to 90 minutes in duration. In each session, a motion picture depicting a carefully defined pattern of supervisory behavior is shown. The movie is used as a basis for group discussion designed to help the trainees understand the "hows" and "whys" of supervisory behavior. The five patterns of behavior are entitled Considerateness, Structuring Expectations, Tolerance of Freedom of Action, Production Emphasis, and Representation.

Five sets of actors, each consisting of a supervisor and two employees, performed two leadership roles each. The resulting motion pictures were used in research designed to test the validity of the role performances. Each movie was shown to seven graduate students in education who described the behavior of the supervisor on a set of Leader Behavior Description Questionnaires. For each role, the supervisor was described significantly higher on the scale describing the role being performed than on the other scales. No significant difference was found between the descriptions of two different actors playing the same role. These results suggest that the role enactments are valid; that is, each actor succeeds in portraying the role that he was supposed to play. The observers' descriptions suggest that the actors gained from experience. For four sets of actors, their second performance appeared to be superior to their first. Copies of these films will be used in the research with vocational trainees.

Three vocational high schools (two in Ohio and one in West Virginia) have agreed to cooperate in the research. Small groups consisting of three or four well adjusted and three or four poorly adjusted students will see the movies and engage in discussion. Ratings of their adjustment to supervision will be obtained before and after training. Equal numbers of control subjects will be rated at the same time, but will not engage in training. If the training is successful, the maladjusted trainees should be rated as responding more favorably to supervision after training than before.

In the past quarter data have been collected from the three schools. The pretest and post test data from two of the schools are in the process of being coded and analyzed.

Activities for next quarter will consist of completing the data processing, analyzing and interpreting the data as well as beginning to formulate an outline for presenting the results.

Development of Facility Planning Guides for Vocational and Technical Education Facilities (Project 36)

The purpose of this project is to develop, evaluate, and distribute a series of manuals or guides to be used in deriving specifications for

vocational and technical education facilities from an analysis of educational requirements.

Initial criteria for the scope, sequence and content of the guides were developed by the project staff working with a group of local specialists in a series of seven conferences. A group of nationally known experts in architecture, school plant planning, and vocational education then reviewed the material and a final set of criteria was established. An outline and format were prepared for the guides and used to develop a model guide in one vocational subject area: Vocational home economics. The outline and the model guide then were supplied to specialists in other vocational areas who identified the content required for adequate guides in the areas of medical technology, dental technology, machine trades, and data processing.

During the quarter the model guide in vocational home economics underwent internal and external evaluation and revision. Arrangements were made for the reconvening of the local consortium to evaluate and discuss the initial draft of the guide. After revisions are made on the basis of insights gained at the consortium meeting, the guide will be further evaluated by four major groups -- officials in an on-going building project, personnel in state departments of vocational education, officials of the U. S. Office of Education, and specialists or instructors in the field of vocational home economics. Each of the nine additional guides will be evaluated in a similar manner. Following final revision, a training seminar will be offered in the use of the guides and copies of the guides will be given appropriate distribution.

Individualizing Educational Materials in Vocational Education (Project 38)

This project aims to develop and evaluate self-instructional materials in agricultural machinery, agricultural supply, and ornamental horticulture from which teachers may assemble curriculum packages tailored to the needs, interests, and capabilities of individual students. It is intended also that the techniques and format developed to individualize these materials will be adaptable to materials in other vocational areas. A review of the literature on individualizing instructional materials was started with special attention being given to theories of learning, behavioral statements of objectives, and factors related to development of individualized materials in diverse vocational areas. Research specialists in communications were consulted concerning alternative techniques for individualizing materials. With the consultation of teacher educators from four states who specialize in curriculum materials, a prototype package then was developed for ornamental horticulture using the instructional modules in horticulture developed by a previous Center study (OE-5-85-009: A Determination of Needed Adjustments and Extensions in the Curricular Patterns of Vocational Education in Agriculture). These prototype materials were tested during May, 1967, with a high school horticulture class. Results were used to

revise the prototype set and to guide development of additional materials. Module Number 9 (Fertilizers, Sales and Service) and Module Number 4 (Agricultural Salesmanship), both from the previous project, provided the starting material for development of two sets of individualized material in agricultural supply by a distributive education coordinator with sales experience.

This quarter tentative guidelines have been developed to aid teachers in individualizing study programs in specific occupational areas. After several short training and planning sessions, the unit in ornamental horticulture was given to the horticulture instructor at Strongsville, Ohio. One of these sessions included state supervisory personnel in Ohio. During the American Vocational Association meeting in Cleveland, Ohio, December 5, teacher educators from the states who planned to test the materials were taken on a tour of the Strongsville School. They were able to observe the use of the materials and discuss problems with the students and instructor. The horticulture instructor from Strongsville evaluated the materials and assisted in an additional revision of the materials.

The next quarter will see the first sets of materials pretested in at least two high schools in each of the following states: Arkansas; Illinois; Nebraska; Kentucky; Ohio; Texas; and Virginia. All tests will be conducted between January 15 and April 1, 1968. The teacher educators, curriculum specialists and supervisors in each state, as well as cooperating teachers and students, will be asked to evaluate the results of the first test. From this evaluation, a decision will be made as to the future of the project.

An Evaluation of the Application of Selected Teacher Education Technique Variables Involving Videotape Recording and/or Micro-teaching in Vocational and Technical Education (Project 44)

The project intends to develop, evaluate, and demonstrate applications of videotape recording and micro-teaching in the development of teaching skills by vocational and technical teachers. The project is planned in four phases. The first phase is devoted to preparations for the central work of the project. In phase two, applications will be developed and evaluated under laboratory conditions for those teaching skills selected as necessary in vocational-technical teaching from the larger set considered by the Stanford University group to be important in academic subjects. Phase three will develop and evaluate applications of priority teaching skills which are unique to vocational-technical education. The last phase will test the applications developed in the preceding laboratory work for efficiency and effectiveness under field conditions and provide demonstrations of successful applications.

During this reporting period, an experiment was performed in teacher education (phase one) to pretest the design for the remaining phases of the

project. Twelve prospective teachers and thirty high school students were recruited and involved in this effort. Rating instruments were developed for evaluation of the teaching sessions. Sixty micro-teaching lessons were videotaped and evaluated to complete the data collection for the experiment. The phase one data are currently being processed.

During the quarter ending April 15, 1968, the data on phase one will be analyzed and a report will be prepared. The experiment planned for phase two will be completed and the data analyzed.

Common and Unique Elements of Vocational and Technical Teacher Education (Project 47)

This project proposes to structure an efficient, effective, and relevant model curriculum for vocational and technical teacher education from explicit analysis of the capabilities required for successful teaching. Common and unique capabilities in professional education will be identified for seven service areas through objective occupational analysis. Priorities for identified capabilities will be established using the critical incident technique. Model programs for teacher education institutions then will be designed on the basis of the results of these analyses.

During this reporting period the methodology for analyzing vocational and technical teaching was further tested and refined. The criteria for identifying teaching elements were revised and a system for describing and writing statements of elements was developed. The system for coding and classifying elements was revised. A preliminary draft of a critical incident questionnaire was developed.

During next quarter, the data collection, both through the initial analysis and through the critical incident questionnaire, will be completed. These data will be reviewed and receive preliminary treatment for data processing.

The Transition from School to Work: Worker Adjustment (Project 51)

The purposes of this project are to identify the major socio-psychological impediments to the adjustment of youth making the transition from school to work and to develop and test instructional materials which have the potential for facilitating the adjustment of young workers. Impediments to young worker adjustment will be identified through: (1) a review of relevant literature; (2) an interview survey with a sample of vocational educators; (3) a questionnaire completed by counselors at the 167 U. S. Youth Opportunity Centers; (4) interviews with samples of youthful workers employed at various types of industrial-business organizations in three areas of the country; and (5) interviews with the immediate supervisors

of these youthful workers. Of the impediments thus identified, one or a few related problems will be chosen as most important. The problem area will then become the focus of a "packaged" program, aimed at its solution, which will be developed, tested at pilot schools, and then offered for general use with vocational-technical students.

During the initial year of this proposed five-year project, an exhaustive review of literature published since 1960 on problems of worker adjustment was completed and 300 abstracts were prepared. Of this number, 195 abstracts were judged to have particular relevance to the problems facing young workers in transition from school to work. These abstracts were incorporated in an annotated bibliography (Garbin, A. P. et. al. Worker Adjustment: Youth in Transition from School to Work. An Annotated Bibliography of Recent Literature) which now is in press. Structured interviews with "open-end" questions elicited responses from 69 vocational educators concerning the major obstacles to the adjustment of young workers and suggestions for curriculum remedies. The vocational educators were from 22 different cities and represented practically every level of the educational structure. Results from this study are presented in a report (Garbin, A. P. et. al. Problems in the Transition from High School to Work as Perceived by Vocational Educators). Questionnaires requesting the same basic information solicited in the vocational educators' survey were forwarded to each counselor employed at the 167 Youth Opportunity Centers. As of this date, 769 questionnaires have been returned. The phase of the project focusing on the perceptions of young workers and their supervisors was initiated during the quarter in cooperation with personnel from Virginia Polytechnic Institute and Louisiana State University in New Orleans. Two interview schedules are in the final stages of development.

During next quarter, the data provided by the Youth Opportunity Centers' counselors will be coded, key-punched, and processed. The major goals to be accomplished in connection with the survey of young workers and supervisors include: (1) completion and pilot testing of the schedules; (2) selection of sample members; and (3) initiation of data collection.

Career Development Aspirations of Post-High School Vocational and Technical Students (Project 57)

This project intends to identify major factors influencing career development patterns of vocational-technical post-high school students, to determine the occupational and educational aspirations of those students, and to draw implications from these findings for vocational guidance, for the design of curricula and programs, and for worker adjustment. Approximately 10,000 students in a stratified national sample of 50 post-high school vocational institutions will provide the data, using a highly structured questionnaire administered to classroom groups.

This project began June 1. Activities pursued during the subsequent period have been limited to a selected review of the literature, an

examination of various questionnaires and interview schedules employed in previous research to identify pertinent questions, items, and scales used in similar studies of other student populations. The questionnaire has been completed and pilot-tested.

The first activity to be accomplished during the next quarter will be to select the schools constituting sampling frames; and randomly identify the classes in each of the schools which will be group administered the questionnaire. The data should be collected by the end of the next quarter.

The Identification of the Personal and Social Characteristics of Opinion Leaders Among Teachers of Vocational Agriculture (Project 63)

The major purpose of the study is to identify the personal and social characteristics of opinion leaders among teachers of vocational agriculture.

The proposed study should provide the guidelines necessary for the identification of opinion leaders among teachers of vocational agriculture. The identification of opinion leaders should aid in narrowing the theory-practice gap which exists in vocational education by allowing state leaders to design dissemination techniques which would fully utilize the personal influence which opinion leaders possess.

A review of the pertinent literature concerning personal influence and opinion leadership was conducted as a portion of a previous study and completed during the past quarter. Consultant advice will be sought during the next quarter from leading authorities in the fields of rural sociology, sociology, and education in an effort to develop an instrument for (1) the identification of opinion leaders among teachers of vocational agriculture; and (2) the identification of personal and social characteristics of opinion leaders. The instrument will be pre-tested by administering it to the teachers in a selected supervisory district in Ohio during February, 1968. After appropriate changes, the instrument will be administered to all vocational agriculture teachers in South Carolina. The data collected will be compiled, analyzed and recommendations prepared in light of the interpretation and evaluations of the results. The initial study should be completed prior to August 31, 1968.

Leadership Development

During the quarter, several leadership development sessions for state personnel in vocational and technical education were held. These included a two-day meeting on information accessibility. This was attended by thirty-six persons. A copy of the program and details are included in "ERIC Clearinghouse for Vocational and Technical Education."

Four research training sessions were held with ninety-seven participants. The four areas of training were: "Applications of Regression Models to Prediction Problems in Vocational and Practical Arts Education"; "Applications of Analysis of Variance Techniques to Evaluation Problems in Vocational and Practical Arts Education"; "Applications of Non-parametric Statistics to Vocational and Practical Arts Problems"; and "Developing Data Collection Instruments."

Work has continued on completing the separate contract for the four technical education institutes conducted last summer. Emphasis has been on evaluation, finalizing supporting materials, and completing the final report of the project.

During the American Vocational Association meeting, The Center Director met with the Board of Directors of the National Association of State Directors in response to their request. One of the outgrowths of this meeting was a request from the State Directors Association for The Center to sponsor a leadership development seminar for members of their Association this summer.

ERIC Clearinghouse on Vocational and Technical Education

Pursuant to earlier agreements between Central ERIC and The Center's project officer, the regular quarterly report submitted to Central ERIC covering the period October 1 through December 31, 1967, is included as the quarterly report of progress for that aspect of The Center.

A. Management Data

1. Significant happenings.

a. Assignment of abstracting and indexing manpower materials from the Department of Labor, Office of Economic Opportunity and HEW for an interagency publication covering the period 1965-1967.

b. Production of the publication, Rotated Display of Descriptors Used by the ERIC Clearinghouse on Vocational and Technical Education, 1st Edition. 1967.

c. National Invitational Research Dissemination Workshop.

Over forty state vocational education Research Coordination Unit personnel or representatives of state directors of vocational education attended a National Research Dissemination and Utilization Workshop conducted by the staff of the ERIC Clearinghouse on Vocational and Technical Education in Columbus, October 11, 12, and 13. The major purpose of this meeting was to improve the dissemination and utilization of research in

vocational and technical education. Specific objectives included developing a greater understanding of the emerging National Information Retrieval and Dissemination System linked to ERIC in the U. S. Office of Education and the role of Research Coordination Units in this system. Emerging from the conference was an enlarged role for RCU's in serving as state information units for vocational and technical education through a linkage with the ERIC Clearinghouse for Vocational and Technical Education at The Center. This relationship would enable state personnel to use the products of the ERIC Clearinghouse and the national ERIC system, such as Research in Education, Abstracts of Instructional Materials in Vocational and Technical Education (AIM), Abstracts of Research and Related Materials in Vocational and Technical Education (ARM), and the microfiche and hardcopy capabilities that go with these publications.

In addition to the RCU's developing a comprehensive information capacity, it is expected that many of the states will supplement ERIC information products with state and local based studies and with additional services, such as integrative and interpretive research reviews and the repackaging of information focused on specific clientele within the state. Considerable discussion centered around the problems of developing coordinated approaches in information systems and the desirability of attaining systems compatibility.

Additional information regarding this conference is included at the end of this report as:

Appendix C
Program October 11-13, 1967

Appendix D
Roster of Participants October 11-13, 1967

Appendix E
Reactionnaire Used October 11-13, 1967

Appendix F
Summary of Reactionnaire Used October 11-13, 1967

2. No changes in organizational structure.

3. Biographies of professional personnel newly employed during the reporting period.

Document Analyst

Labor Economics - ERWIN TEUBER October 9, 1967

B.A. St. Cloud State College, Minnesota
Pursuing doctoral program at The Ohio State University
Experience: Director of Economic Development and Employment, Columbus Urban League, Columbus, Ohio.

B. Document Inventory

Acquisitions

1. Total documents acquired at beginning of report period 4,348

2. Documents received during period -- Solicited 320
Unsolicited 643

Subtotal

	Solicited	Unsolicited
Items screened out for review	13	49
Accessioned titles	271	526
Titles added on withdrawn numbers	36	68
	320	643

Total number of titles acquired by end of report period 5,311

Disposition

1. Total documents on hand at end of last report period (4,348 - 206 documents transferred, etc. - 206 documents completely abstracted, etc. = 3,936) 3,936

2. Documents received during period -- Solicited 320
Unsolicited 643

TOTAL 4,899

3. Documents rejected, transferred, etc. 104

4. Documents completely abstracted and indexed

	On Hand	Sent to NARC
a. Reports	142	57
b. Books	2	0
c. Journal articles	25	0

d.	Conference papers, manuals, handbooks, guides, etc.	11	5	
e.	Speeches	15	2	
f.	Other	52	136	
	Total	247	200	447
	Total of items 3 and 4			-551

5. Documents in process or awaiting processing 4,348

6. Total documents on hand at end of report period 4,348

C. Services

1. Total requests made of the clearinghouse during report period

a.	Phone	9
b.	Letter	342
c.	Visit	2
d.	Other	0
		353

2. Types of requests

a.	Reference-nonsubject	0
b.	Reference-subject	191
c.	Spot bibliographies or literature searches	0
d.	General questions on ERIC	156
e.	Other	6
		353

3. General breakdown of users

a.	Education	330
b.	Business	17
c.	Other	6
		353

D. Promotional Products

No new materials.

E.-1 Information Analysis Data (Items Completed)

I. Bibliography

A. Implications of Women's Work Patterns for Vocational and Technical Education: An Annotated Bibliography.

1. Physical Characteristics
Period covered: 1964 to October, 1967
October 1967. 25 pages.
Topical classification
No indexes
80 annotated citations

2. Purpose

Initiated for the Center Research Project, Implications of Women's Work Patterns. It should be helpful for those who are planning vocational and technical education programs which prepare women for employment.

3. Intended Audience and Impact
Guidance counselors, administrators, supervisors, teachers, teacher educators, librarians.

4. Personnel Engaged
Center project staff: Dr. Sylvia Lee, Center Project Director; and three research associates: Kathleen M. Howell, Patricia Smith, and Louise Vetter.

E.-2 Information Analysis Data (Items in Progress)

I. Research Reviews

A. Review and Synthesis of Research on the Economics of Vocational-Technical Education, by J. Robert Warmbrod.
Recently commissioned for publication sometime in 1968.

B. Review and Synthesis of Research in Health Occupations, by Elizabeth Kerr and Robert Tomlinson.
Recently commissioned for publication sometime in 1968.

E.-2 Publications Released During This Period

Abstracts of Instructional Materials in Vocational and Technical Education. Winter 1967. 194 p.

Abstracts of Research and Related Materials in Vocational and Technical Education. Winter 1967. 191 p.

Rotated Display of Descriptors Used by the ERIC Clearinghouse on Vocational and Technical Education. 1st Edition. 1967. 29 p.

F. Involvement with Professional Organizations

1. Participation on panels or presentations at special programs and professional meetings.

Date	Name of Meeting	Place	Person
Oct. 7, 1967	25th 4-State Conference on Industrial Arts and Vocational Education	Kansas State College, Pittsburgh, Kansas	Dr. Aaron Miller Center Specialist, Technical Education
Oct. 11-13, 1967	National Invitational Research Dissemination Workshop	Columbus, Ohio	Dr. Robert Taylor Director Mrs. Celianna Wilson Coordinator Mr. Charles Harris Acquisition Specialist Mrs. Eunice Lovejoy Abstracting-Indexing Editor Dr. Robert White Retrieval Specialist
Oct. 26, 1967	Ohio Association of School Librarians and Educational Media Council of Ohio (4 presentations)	Cincinnati, Ohio	Mrs. Eunice Lovejoy
Oct. 27, 1967	Indiana State Teachers Association	Indianapolis, Indiana	Dr. Neal Vivian Center Specialist, Distributive Education
Nov. 2, 1967	North Central Regional Conference, Occupational Education Project, American Association of Junior Colleges	Denver, Colorado	Dr. Robert Taylor

Nov. 11, 1967	All-Ohio Conference for College and University Counseling Centers[1]	Columbus, Ohio	Dr. Robert Campbell Center Specialist, Occupational Psychol.
Nov. 14, 1967	National Conference on Post-High School Distributive Education	Kalamazoo, Michigan	Dr. Neal Vivian Center Specialist, Distributive Education
Nov. 17, 1967	Statewide Vocational Education Conference for Supervisors and Teacher Educators in Ohio[1]	Columbus, Ohio	Dr. Robert Taylor Director
Nov. 30, 1967	3rd Indiana Manpower Research Conference	Univ. of Indiana, Bloomington	Dr. Aaron Miller Center Specialist, Technical Education
Dec. 2-3, 1967	Pre-AVA ERIC Meeting	Cleveland, Ohio	Mrs. Celianna Wilson Coordinator Mr. Charles Harris Mr. Malvern Miller Document Analyst Dr. Robert White Retrieval Specialist
Dec. 3, 1967	AVA-State Directors of Vocational Education[1]	Cleveland, Ohio	Dr. Robert Taylor Director
Dec. 4, 1967	AVA-National Association of Industrial Teacher Educators[1]	Cleveland, Ohio	Dr. Calvin Cotrell Center Specialist, Trade and Indus. Ed.
Dec. 3, 1967	AVA-Report to the Executive Committee of the National Association of Industrial Teacher Educators[1]	Cleveland, Ohio	Dr. Calvin Cotrell Center Specialist, Trade and Indus. Ed.
Dec. 4, 1967	AVA-Agricultural Education Research Committee	Cleveland, Ohio	Mrs. Celianna Wilson Coordinator
Dec. 4, 1967	AVA-Distributive Education	Cleveland, Ohio	Dr. Neal Vivian Center Specialist, Distributive Education
Dec. 4, 1967	AVA-National Association of State Supervisors of Trade and Indus. Education[1]	Cleveland, Ohio	Dr. Calvin Cotrell Center Specialist, Trade and Indus. Ed.

[1]Information about ERIC was given as part of another presentation.

Dec. 5, 1967	AVA-Professional Information Committee, Agricultural Education Div.	Cleveland, Ohio	Dr. Robert White Retrieval Specialist
Dec. 6, 1967	Graduate School of Library Science Colloquium Case-Western Reserve University	Cleveland, Ohio	Mrs. Celianna Wilson Coordinator
Dec. 6, 1967	AVA-Board of Directors[1]	Cleveland, Ohio	Dr. Robert Taylor Director
Dec. 8, 1967	AVA-Trade and Industrial Education Local Directors	Cleveland, Ohio	Dr. Calvin Cotrell Center Specialist, Trade and Indus. Ed.
Dec. 11, 1967	Ohio State University Graduate Seminar	Columbus, Ohio	Dr. James Hensel Center Specialist, Agricultural Education
Dec. 30, 1967	North Central Business Education Association	Minneapolis, Minnesota	Dr. Neal Vivian Center Specialist, Distributive Education

2. Joint publication arrangements between clearinghouses and professional organizations.

   a. Bibliography

      (1) The Choice of Vocational Education as an Educational Opportunity: An Annotated Bibliography

         (a) Physical Characteristics--
         Approximately 200 titles
         Publication date: Spring 1968

         (b) Purpose--
         Initiated by the Commission on Guidance and Vocational Education of the American Personnel and Guidance Association for part of a symposium to be held at the annual APGA National Convention in April, 1968.

         (c) Intended Audience and Impact--
         Professional members of APGA, guidance counselors.

         (d) Personnel Engaged--
         Center Staff: Dr. Robert Campbell, Specialist, Occupational Psychology, and Research Associates.

3. Other affiliation or arrangements with specialized professional organizations.

a.	Research Committee for the Distributive Education Division of the American Vocational Association. As a result of the presentation, the Committee recommended that the network for acquiring dissertations in distributive educa- be developed in harmony with the professional structure of the Council for Distributive Teacher Educators.	Mr. Charles Harris Acquisition Specialist Mrs. Eunice Lovejoy Abstracting- Indexing Editor
b.	Executive Committee of the National Association of Industrial Teacher Educators. Deferred formal recommendation pending further discussion of this problem with Dr. Calvin Cotrell, Chairman of the NAITE Research Committee.	Mr. Charles Harris Acquisition Specialist
c.	Professional Information Committee, Agricultural Education Division of the American Vocational Association. To supply sources of instructional information to ERIC.	Dr. Robert White Retrieval Specialist
d.	Commission on Guidance for Vocational Education - American Personnel and Guidance Association, Division of National Vocational Guidance Association, American School Counselors Association. Reciprocal agreement.	Dr. Robert Campbell Center Specialist, Occupational Psychology
e.	Agricultural Education Research Committee of AVA. Establishment of a network with 4 regional groups of teacher educators to input dissertations in agricultural education into VT-ERIC Clearinghouse.	Mrs. Celianna Wilson Coordinator Dr. J. Robert Warmbrod Chairman Agricultural Ed. Research Committee
f.	NAITE - Executive committee voted to support the acquisition of materials for ERIC through cooperation of the Research Committee.	Dr. Calvin Cotrell Center Specialist, Trade and Industrial Education
g.	Pre-AVA Information Seminar This two-day seminar was conducted jointly by the American Institutes for Research and the ERIC Clearinghouse on Vocational and Technical Education. The AIR presentation was held during the first half day with the VT-ERIC presentation taking the remainder of the time.	VT-ERIC Staff AIR Staff

This program was designed for persons in vocational and technical education with leadership positions. The objectives were (1) to inform these persons about information systems in education and the behaviorial sciences with particular emphasis on the ERIC system; (2) to give initial training in the use of the ERIC system and its products. Additional information regarding this conference is included at the end of this report as:

Appendix G
Program December 2-3, 1967

Appendix H
Roster of Participants December 2-3, 1967

Appendix I
Reactionnaire Used December 2-3, 1967

Appendix J
Results from Reactionnaire December 2-3, 1967

Publications

During the quarter eleven publications were completed and distributed to target audiences. A complete list of these publications is included as Appendix A.

Research Library

During the quarter progress has been made in the further development of the collection of books, monographs, and serials in The Center's Research Library. Pertinent dissertations on microfilm also have been received.

There is continued activity in acquiring vocational and technical education materials from foreign English-speaking countries. Contacts have been made with 20 agencies in Great Britain and 13 in Canada as well as 30 information agencies in other countries.

Plans are underway to seek further assistance in this area under the Library Development Act.

Additional Contracts and Grants

In addition to the various projects and activities conducted by The Center through its own continuing budget, a number of other contracts for specific projects and activities are in force. They are reported herein to show the total involvement and impact of The Center.

A Planning Study to Determine the Feasibility of a Research Project Concerning Employment Opportunities and Training Needs in Farming and Off-farm Agricultural Business and Industry

Dr. Richard H. Wilson, Associate Professor of Agricultural Education at The Ohio State University, has been released by the Department to work half time at The Center on this project.

The major purpose of the study is to plan and coordinate a nationwide study concerning employment opportunities and training needs in farming and off-farm agricultural business and industry. The planning study would enlist the combined efforts of the U. S. Departments of Agriculture, Commerce, Health, Education and Welfare, and Labor with leaders in the field of agricultural education in developing a long-range project for education in agriculture.

The developmental project will provide the necessary background, coordination, and design for a massive attack on a growing problem in the identification of employment opportunities and training needs in farming and off-farm agricultural businesses and industry. The project will also build a framework for coordinating the educational efforts of several U. S. Departments, teacher educators, and supervisors with agricultural business and industrial firms.

The first concern of the investigator has been to conduct a review of the literature to obtain an overview of the related research that has been conducted during the past several years. In late February or early March, an Advisory Committee will be called into a work session in Washington, D. C. to assist the project coordinator in designing the national study. His efforts during the second quarter will be to establish guidelines for the conduct of the study, and to design and submit the first rough draft of the proposal for the major project concerning employment opportunities and training needs in agriculture.

A Planning Study to Determine the Feasibility of Developing a New Business and Office Education Curriculum

The purpose of this study is to explore the feasibility of and procedures for developing a major project in the office occupation area. Specific attention will be directed toward the utilization of the "systems approach" in developing a vocational office curriculum that would be congruent with the concepts developed in the organic curriculum theory.

During this quarter a search of secondary sources was made to determine ways of analyzing job tasks. Job analysis techniques found in secondary sources were adapted for use in analyzing office activities. Techniques for analyzing office activities were examined to determine whether or not each job analyses technique was comprehensive enough to provide data on which behavioral objectives could be constructed. The behavioral objectives would serve as the basis on which to write curriculum materials.

In addition, meetings were held with disciplines such as management, psychology, and mathematics to determine characteristics of each that could be applied to office activities and the construction of a curriculum to prepare office workers to perform office activities.

Next quarter consortia will be held with business managers, hardware researchers, and systems and procedures experts to determine changes that are taking place in the office as a result of automation. Job analysis techniques will be reviewed and revised to incorporate changes that are identified during the consortia. A study of research relating to behavioral objectives will be made to determine methods for writing behavioral objectives for office occupations.

Research Training Program (A. V. A. Presession)

The broad purpose of this special training program was to upgrade the research competencies of participants by focusing upon the statistical techniques available for application to critical, researchable problem areas in vocational and practical arts education. This program was conducted December 2 and 3, just prior to the A. V. A. Convention in Cleveland, Ohio and involved 97 participants.

The training programs began at 8:30, Saturday, December 2, 1967 and closed at 5:00 p.m. on Sunday, December 3, 1967 for a total of fourteen hours of instruction.

Following is the major content topics covered by each of the concurrent programs during the two-day period, together with the instructors.

Program A - "Applications of Regression Models to Prediction Problems in Vocational and Practical Arts Education."

James S. Terwiliger, University of Minnesota
(Statistical Specialist), and

David J. Pucel, University of Minnesota
(Vocational Consultant)

Program B - "Applications of Analysis of Variance Techniques to Evaluation Problems in Vocational and Practical Arts Education."

Gene V. Glass, University of Colorado (Statistical Specialist), and

Douglas Sjogren, Colorado State University (Vocational Consultant)

Program C - "Applications of Non-parametric Statistics to Vocational and Practical Arts Problems."

Leonard Marascuilo, University of California Berkeley (Statistical Specialist), and

Everett Edington, Director, Research Coordinating Unit, Sacramento (Vocational Consultant)

Program D - "Developing Data Collection Instruments."

J. Thomas Hastings, University of Illinois (Statistical Specialist), and

Lloyd Phipps, University of Illinois (Vocational Consultant)

During the next quarter a complete report on the conference will be prepared for publication. The report will describe in detail the proceedings of the lecture workshops and will include the results of evaluation procedures.

Proposals Submitted

Proposals were submitted for summer training institutes in Programming-Planning-Budgeting Systems and Leadership Development in Technical Education. The institute in PPBS would be held in the fall and focus on forty leaders in state departments of vocational education to provide a means for the development of a cadre of vocational education personnel in state departments of vocational education knowledgeable in the concepts, methods, and practice of PPBS. This would be the third year for the leadership development institutes in technical education which aim to develop administrative leadership in new and inexperienced technical education administrators. Two institutes are planned: One will be conducted at the University of Michigan in early June and the second at Texas A. & M. University in early August.

The Center also submitted a proposal for "Development of Performance Goals for a New Office and Business Education Learnings System." Dr. Frank W. Lanham, Associate Professor, Distributive and Office Education, The University of Michigan, will serve as principal investigator of this project.

Staff Development

Arrangements have been made for Dr. Melvin L. Barlow, who served as staff director on the Advisory Council on Vocational Education, to spend Monday, March 11, with The Center staff on the implications of the Council's report.

A second "advance" meeting has been scheduled for March 17, 18, and 19. This meeting, to be conducted in a retreat atmosphere, but concentrating on "advanced" thinking and projection in relation to Center activities, will provide valuable inputs to long-range planning and operational efficiency. A similar meeting was held April 27 and 28, 1967, and was deemed quite successful in contributing to staff development and effectiveness in The Center program.

Advisory Committee Meeting

The National Advisory Committee meeting was held on January 11 and 12. During the two-day meeting, the committee made several valuable suggestions concerning the role and long-range focus of The Center. Current issues and trends in vocational education requiring research and development were also discussed. Specific reactions were received on current and contemplated projects of The Center. Discussions were also held on optimizing the services of the ERIC Clearinghouse.

The terms of several members have expired, therefore, a number of replacements have been made. A list of the Advisory Committee is included in Appendix B.

The next meeting was scheduled for June 20 and 21.

Center Contributions to Research and Development Activities of Other Agencies, Groups, and Organizations

Members of The Center staff have held several meetings with members of the Rocky Mountain Educational Laboratory. The primary focus was on a developmental project by the Regional Lab with the assistance of The Center.

Arrangements have been made for reporting The Center's activities to members of the Division of Vocational and Technical Education in the Office of Education. These will include activities and progress in research, development, training, and dissemination (ERIC).

A research planning meeting will be held with representatives of the Industrial Arts Division of the American Vocational Association and the American Industrial Arts Association.

American Vocational Association Meeting

Members of The Center staff assumed a number of leadership roles at the meeting of the American Vocational Association held in Cleveland December 4 to 8. These included responsibility for organizing two sessions for members of State Boards of Vocational Education and a general session on developing leadership in vocational education. Staff members also appeared on a number of division programs and before the National Association of State Directors of Vocational Education.

The Director of The Center met with the A. V. A. Board of Directors and provided them with a progress report of activities. Other Center staff members reported to their specific areas. A number of meetings were also held with research and publication committees to improve acquisition of materials for the ERIC system.

Several leadership development sessions were held on December 2 and 3. These are reported under "Leadership Development."

There was considerable interest in the booth which portrayed The Center's program maintained in the exhibit hall. Numerous contacts were made concerning The Center's research, development, training, and dissemination program.

Facilities

During the quarter, a temporary parking lot has been established and construction began on the addition to The Center building. This addition will provide another 20,000 square feet of office space, support facilities, and conference rooms.

A P P E N D I X

APPENDIX A

Publications of The Center for Vocational and Technical Education

Abstracts of Instructional Materials in Vocational and Technical Education. Columbus, Ohio: The Center for Vocational and Technical Education, The Ohio State University. Quarterly, Winter, 1967.

Abstracts of Research and Related Materials in Vocational and Technical Education. Columbus, Ohio: The Center for Vocational and Technical Education, The Ohio State University. Quarterly, Winter, 1967.

Garbin, A. P., Robert E. Campbell, Dorothy P. Jackson, and Ronnie Feldman. Problems in the Transition from High School to Work as Perceived by Vocational Educators. Columbus, Ohio: The Center for Vocational and Technical Education, The Ohio State University. October, 1967. (Research Series, No. 20)

Hensel, James W., D. D. Bishop, and J. R. Crunkilton. Enlisted Men Separating from the Military Service as a Potential Source of Teachers for Vocational and Technical Schools. Columbus, Ohio: The Center for Vocational and Technical Education, The Ohio State University. October, 1967. (Research Series, No. 13)

Hensel, James W., and Cecil H. Johnson, Jr. An Evaluation of the Off-farm Agricultural Occupations Materials. Columbus, Ohio: The Center for Vocational and Technical Education, The Ohio State University. October, 1967. (Research Series, No. 21)

Lee, Sylvia L., Kathleen M. Howell, Patricia Smith, and Louise Vetter. Implications of Women's Work Patterns for Vocational and Technical Education: An Annotated Bibliography. Columbus, Ohio: The Center for Vocational and Technical Education, The Ohio State University. October, 1967. (Bibliography Series, No. 1)

Lee, Sylvia, Louise Vetter, Patricia Smith, and Kathleen Howell. Implications of Women's Work Patterns for Vocational and Technical Education. Columbus, Ohio: The Center for Vocational and Technical Education, The Ohio State University. October, 1967. (Research Series, No. 19)

Nangle, Grace. Health Occupations Education Centers. Columbus, Ohio: The Center for Vocational and Technical Education, The Ohio State University. October, 1967. (Leadership Series, No. 9)

Rice, Dick C., and Powell E. Toth. The Emerging Role of State Education Departments with Specific Implications for Divisions of Vocational-Technical Education. Columbus, Ohio: The Center for Vocational and Technical Education, The Ohio State University. October, 1967. (Research Series, No. 11)

Rotated Display of Descriptors Used by the ERIC Clearinghouse on Vocational and Technical Education. First Edition. Columbus, Ohio: The Center for Vocational and Technical Education, The Ohio State University, 1967.

Valentine, I. E., and M. J. Conrad. Progress Report: Vocational-Technical Facilities Report. Columbus, Ohio: The Center for Vocational and Technical Education, The Ohio State University. October, 1967.

APPENDIX B

Advisory Committees and Panels

National Advisory Committee (January 11 and 12)

Mr. R. D. Anderson, State Director of Vocational Education, State Department of Education, Columbia, South Carolina

Dr. Wilbur B. Brookover, Professor, Sociology and Education, Michigan State University, East Lansing, Michigan

Mrs. Lucy C. Crawford, Associate Professor, Distributive Education, Virginia Polytechnic Institute, Blacksburg, Virginia

Mr. L. C. Dalton, State Supervisor of Agricultural Education, State Department of Education, University Park, New Mexico

Mr. Donald Gilles, State Supervisor of Trade and Industrial Education, State Department of Education, Salem, Oregon

Dr. Alberta Hill, Chairman, Department of Home Economics Education, Iowa State University, Ames, Iowa

Dr. Jacob Kaufman, Director, Institute for Research in Human Resources, Pennsylvania State University, University Park, Pennsylvania

Mr. D. N. McDowell, Secretary of Agriculture, Madison, Wisconsin

Mr. Sherrill McMillen, Acting Assistant Commissioner, Vocational and Technical Education, Office of Education, Department of Health, Education and Welfare, Washington, D. C.

Miss Grace Nangle, State Supervisor, Health Occupations, State Department of Education, Boston, Massachusetts

Dr. J. Win Payne, Superintendent, Napa Valley Unified School District, Napa, California

Dr. Maurice W. Roney, Director, School of Industrial Education, Oklahoma State University, Stillwater, Oklahoma

Dr. John Rowlett, Professor, Industrial Arts, Eastern Kentucky State College, Richmond, Kentucky

Dr. James A. Sensenbaugh, State Superintendent of Education, State Department of Education, Baltimore, Maryland

Mr. Bernard A. Shilt, Director of Business Education, Buffalo Public Schools, Buffalo, New York

Mr. Joseph Tuma, Director, Manpower Utilization Studies Division, Institute of Labor and Industrial Relations, Detroit, Michigan

ERIC Clearinghouse Advisory Committee (January 11 and 12)

(All members of The Center's National Advisory Committee listed above)

Dr. Gordon Law, Director of Research, American Vocational Association, Inc., Washington, D. C.

Dr. George Luster, Director, Instructional Materials Laboratory for Vocational Education, University of Kentucky, Lexington, Kentucky

Agricultural Education Advisory Committee (December 3)

Dr. Raymond J. Agan, Head Teacher Trainer, Department of Agricultural Education, Kansas State University, Manhattan, Kansas

Mr. L. C. Dalton, State Supervisor, Agricultural Education, State Department of Education, Las Cruces, New Mexico

Mr. T. L. Faulkner, State Supervisor, Agricultural Education, State Department of Education, Montgomery, Alabama

Mr. Ralph A. Guthrie, Chief, Agricultural Education, State Board of Vocational Education and Rehabilitation, Springfield, Illinois

Mr. Everett Lattimer, Associate in Agricultural Education, State Department of Education, Albany, New York

Dr. Robert R. Price, Head, Department of Agricultural Education, Oklahoma State University, Stillwater, Oklahoma

Dr. Glenn Z. Stevens, Teacher Trainer, Department of Agricultural Education, Pennsylvania State University, University Park, Pennsylvania

Dr. O. E. Thompson, Assistant Teacher Trainer, Department of Agricultural Education, University of California, Davis, California

Project Advisory Committee, "The Development of a Model to Evaluate State Programs of Vocational and Technical Education (November 3)

State Directors of Vocational Education

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Mr. J. R. Cullison, State Director, Vocational Education, State Department of Education, Phoenix, Arizona

Mr. Paul M. Hodgson, State Director, State Department of Education, Dover, Delaware

Mr. William G. Loomis, State Director, State Department of Education, Salem, Oregon

Mr. Walter Markham, State Director, State Department of Education, Boston, Massachusetts

Dr. Joseph Murphy, State Director, State Department of Education, Hartford, Connecticut

Dr. Byrl Shoemaker, State Director, State Department of Education, Columbus, Ohio

Mr. Sam Wick, State Director, State Department of Education, St. Paul, Minnesota

U. S. Office of Education (Met with them at various times on individual basis.)

Mr. Lawrence Braaten, Project Officer, Division of Comprehensive and Vocational Education Research, U. S. Office of Education, Department of Health, Education and Welfare, Washington, D. C.

Mr. Grover W. Durnell, Program Planning Officer, Bureau of Adult, Vocational and Library Programs, U. S. Office of Education, Department of Health, Education and Welfare, Washington, D. C.

Dr. Otto Legg, Chief, Program Planning Section, Division of Vocational and Technical Education, U. S. Office of Education, Department of Health, Education and Welfare, Washington, D. C.

Mr. Bernard Michael, Program Evaluation Officer, Bureau of Adult, Vocational, and Library Programs, U. S. Office of Education, Department of Health, Education and Welfare, Washington, D. C.

Individuals (Met with them at various times on individual basis.)

Dr. Albert Jochen, Retired State Director of Vocational Education, State Department of Education, Trenton, New Jersey

Dr. Carl Lamar, Assistant Superintendent of Public Instruction, State Department of Education, Frankfort, Kentucky

APPENDIX C

NATIONAL INVITATIONAL
RESEARCH DISSEMINATION WORKSHOP

October 11, 12, and 13, 1967

PROGRAM

Wednesday, October 11, 1967

8:30	Registration: Stouffers University Inn
9:00-11:45	Morning Session
9:00	Conference Overview - Robert White, Retrieval Specialist, VT-ERIC Clearinghouse
9:10	Responsibilities of the Research Coordinating Units as Perceived by State Directors - J. R. Cullison, Director of Vocational Education, Arizona
9:40	Optimizing the Role of the RCU's and Providing Effective Information Dissemination Systems for Vocational-Technical Education - David Bushnell, Chief, Division of Comprehensive and Vocational Education Research, Bureau of Research USOE
10:15	Coffee Break
10:30	The RCU as a One-Stop Information Center for Vocational-Technical Education - Lee Burchinal, Chief, Division of Information Technology and Dissemination, Bureau of Research, USOE
11:00	Reaction Panel Joe Clary, Moderator, North Carolina Ken Eaddy, Florida Art Lee, Arizona John Rolloff, Arkansas
11:45	Lunch
1:15-4:45	Afternoon Session

1:15	Progress and Possibilities in Information Systems for Vocational-Technical Education - Robert E. Taylor, Director, The Center for Vocational and Technical Education, The Ohio State University
1:50	The ERIC System - Organization and Design - Robert White
2:30	The Vocational-Technical Education Clearinghouse - Mrs. C. Wilson, Coordinator, VT-ERIC Clearinghouse
3:20	Coffee Break
3:40	Overview of the Center's Research Activities - Edward J. Morrison, Research Coordinator, The Center for Vocational and Technical Education, The Ohio State University
4:10	VT-ERIC Publications and Products - C. Wilson and Robert White
4:45	Adjourn
	Dinner
7:15	Evening Session
8:45	Tour at VT-ERIC Facilities

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Thursday, October 12, 1967

8:30-11:45	Morning Session
8:30	Abstracting and Terminology Development, Eunice Lovejoy, Indexing-Abstracting Editor, VT-ERIC Clearinghouse
9:00	Indexing Work Sessions - Document Analysts, VT-ERIC Clearinghouse
9:45	Optical Coincidence Search Demonstration - Robert White
10:05	Coffee Break
10:25	Reports of Selected States in Organizing Information Systems Compatible with ERIC - Duane Neilson, Moderator,

Chief, Organization and Administration Studies.
Branch, Bureau of Research USOE
Everett Edington, California
George Robinson, Kansas

11:40 Lunch

1:15-
4:45 Afternoon Session

1:15 Search Strategy and Use of VT and ERIC Indexes - Robert White

1:55 Areas of Coordination in Use of VT Products - C. Wilson

2:40 Pre-AVA Research Training Conference - Neal E. Vivian, Specialist, The Center for Vocational and Technical Education, Ohio State University

3:00 Coffee Break

Developing and Implementing State Oriented Information Systems

3:20 Organization of Discussion Groups

3:25 Input to the ERIC System - Charles Harris, Acquisition Specialist, VT-ERIC Clearinghouse

4:05 Information Retrieval and Search - Robert White

Dinner

7:15-
9:00 Evening Session

7:15 Presentation of Center Projects and Development - Center Specialists

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Friday, October 13, 1967

8:30-11:45	Morning Session
	Developing and Implementing State Oriented Information System
8:30	Information Analysis, Packaging, and Dissemination - Gordon McCloskey, Professor, Washington State University
9:15	Suggestions for RCU User Awareness Activities - Robert E. Taylor and C. Wilson
9:40	Coffee Break
10:00	Preparation of Individual Plans for Implementing Dissemination System in the Individual States - Consultants Available
11:45	Lunch
1:15-4:45	Afternoon Session
1:15	Procedures in Contracting and Obtaining Hardware and Software for Dissemination Activities - USOE Staff
1:35	Summarization - Robert E. Taylor and Staff
2:25	Refreshment Break
2:40	Consultation Time for Individual Problems

APPENDIX D

NATIONAL INVITATIONAL RESEARCH DISSEMINATION WORKSHOP

October 11, 12, and 13, 1967

ROSTER OF PARTICIPANTS

Perry Farrar	Research Analyst, RCU	Alabama
Arthur Lee	Director, RCU	Arizona
John A. Rolloff	Director, RCU	Arkansas
Everett Edington	Coordinator of Research, RCU	California
Douglas Sjogren	Director, RCU	Colorado
Charles Bertagna	Assoc. Consultant, RCU	Connecticut
Fred Finsterbach	Director, RCU	Delaware
Kenneth Eaddy	Director, RCU	Florida
Mary Kay Murphy	Technical Writer	Georgia
Kenneth Loudermilk	Director, RCU	Idaho
David Helgager	Information Specialist, RCU	Illinois
Walter Penrod	Assistant Director, RCU	Indiana
Clifton Kessler	Chief, Educational Media, RCU	Iowa
George Robinson	Director, RCU	Kansas
Daniel S. Arnold	Director, RCU	Kentucky
Charles Wade	Assoc. Res. Specialist, RCU	Kentucky
Paul Brown	Director, RCU	Louisiana
Melvin Garner	Assistant Director, RCU	Maryland
Harry Blanchard	Consultant, RCU	Michigan
Brandon B. Smith	Research Fellow, RCU	Minnesota
Glenn White	Director, RCU	Missouri
Barbara Crebo	Research Assistant, RCU	Montana
C. A. Cromer	Operations Mgr., RCU	Nebraska
Edward Loveless	Associate Professor	Nevada
Richard Barker	Director, RCU	New Hampshire
Rudolph Girandola	Supervisor, RCU	New Jersey
Bill Barnes	Assistant Director, RCU	New Mexico
Louis Cohen	Director, RCU	New York
Leonard Powell	Research Aide, RCU	New York
Joe Clary	Director, RCU	North Carolina
William Puder	Assistant Director, RCU	North Carolina
Norman Ehresman	Director, RCU	North Dakota

C. O. Tower	Supv. of Research and Survey, RCU	Ohio
Bill Stevenson	Director, RCU	Oklahoma
T. A. Ryan	Director, RCU	Oregon
Clarence Dittenhafer	Research Associate, RCU	Pennsylvania
Charles Hailes	Director, RCU	Rhode Island
E. T. Carpenter	Director, RCU	South Carolina
C. E. Young	Supv. of Vocational Research	South Carolina
Ed Hudgens	Coord. Program Service, RCU	Tennessee
Douglas Towne	Director, RCU	Tennessee
Ray Barber	Director, RCU	Texas
Austin Loveless	Assoc. Director, RCU	Utah
George Pilant	Coordinator, RCU	Washington
Glenn Smith	Director, RCU	West Virginia
Charles Divita	Research Assoc., RCU	West Virginia
Roland Krogstad	Director, RCU	Wisconsin
Duane Nielsen	Director, OAS Branch	USOE
Larry Braaten	Project Officer	USOE
David Bushnell	Chief, DCVE	USOE
Lee Burchinal	Chief, Div. Info. Tech. & Dissem.	USOE
J. R. Cullison	Director of Vocational Education	Arizona
Gordon McCloskey	Director, Voc. Ed.-Research	Washington
Robert Taylor	Director	
Celianna Wilson	Information Services Coordinator	
Robert White	Retrieval Specialist	
Charles Harris	Acquisition Specialist	
Eunice Lovejoy	Indexing-Abstracting Editor	
Edward Morrison	Research Coordinator	
Neal Vivian	Distributive Education Specialist	
Wilbur Ball	VT Staff, Document Analyst	
Harold Carr	VT Staff, Document Analyst	
Jean Kintgen	VT Staff, Document Analyst	
Erwin Teuber	VT Staff, Document Analyst	
Joel Magisos	VT Staff, Document Analyst	
Emmett Mason	VT Staff, Document Analyst	
Mal Miller	VT Staff, Document Analyst	
Frances Parker	VT Staff, Document Analyst	
Paul Steagall	VT Staff, Document Analyst	

APPENDIX E

NATIONAL INVITATIONAL
RESEARCH DISSEMINATION WORKSHOP

October 11, 12 and 13, 1967

REACTIONNAIRE

Purposes of Meeting:
1. Training session on information systems
2. Development of system compatibility between ERIC and information programs in the states

1. What features of the program did you find most helpful?

2. What elements of the program could have been deleted?

3. What items do you believe should have been included in the program?

4. Specifically, what are some immediate needs for research development and training to implement the concepts and purposes of this meeting? (What additional conferences and workshops are needed? When should they be held? Who should be involved?)

APPENDIX F

NATIONAL INVITATIONAL RESEARCH DISSEMINATION WORKSHOP

October 11, 12 and 13, 1967

SUMMARY OF REACTIONNAIRE

1. ITEMS THOUGHT TO BE MOST HELPFUL

No. of Responses	Items
1	Bushnell's talk
7	Indexing session
4	USOE presentations
6	Dr. Taylor's talk
1	Dr. White's talk
6	Information retrieval and search
1	Opening session - vital issues
8	Information on AIM and ARM
8	Details of ERIC input and retrieval
6	Role of RCU's in national dissemination service
7	Visit to Clearinghouse
2	Information on microfiche
3	Organization of presentations
3	Availabilities of consultants and presentations of specialists
2	Presentation of Center projects
7	All aspects interesting
2	Mr. McCloskey's talk
4	Handouts - transparency materials
1	All presentations on Thursday
1	Information on including additional local data in system
1	Suggestions and examples of state level indexing systems
1	Interaction with other RCU directors
2	Details of other (Calif.) state's procedures
2	Total program
1	Operations at The Center
3	Purpose and function of ERIC
2	VT-ERIC processes

2. ITEMS THAT SHOULD HAVE BEEN DELETED FROM THE MEETING

No. of Responses	Items
9	Nothing
1	Use local "Talent" on tele-casts
4	Research project presentations
1	45-minute "Outline of Plan"
2	Group meetings on indexing
2	Individual plan preparation
3	Those who did not give specific insight
1	First night's session
3	Stay within 8:00 - 5:00 schedule
1	Evaluation session
1	Detail
6	Repetition of ERIC functions
1	Meeting held downtown
1	View of Center hardware
1	Repetition of women speakers
1	Center projects
1	Friday's meetings were generally "repeats"
1	Evening meetings
1	Information retrieval and search
1	RCU panelists sessions
1	Historical development of ERIC

3. ITEMS THAT SHOULD HAVE BEEN INCLUDED

No. of Responses	Items
2	Orientation session on related data as found in AERA Educational Research issue.
1	Session outlining basic philosophy and objectives of ERIC
1	Thesaurus of terms
10	Discussion hour or half day in small groups
5	Nothing
1	Emphasis on critical evaluation
1	Business meeting for directors
3	Status of other clearinghouses
1	Campus or city tour
1	List of other information sources
1	Copy of names in attendance prior to meeting
1	More "learned" advice
4	Step by step procedure for implementing an information system through RCU's
1	Opportunity to talk with more than one RCU Director

1	Consultant from Central ERIC to provide information concerning criteria for inclusion of document in ERIC Hardware exhibits
1	Information on estimated personnel needed
3	Information on estimated equipment needed
1	Closure on question of intercommunication among clearinghouses
1	More information or stress on the "broad" picture of information dissemination
1	Detail of where and how to order microfiche originals
1	More detailed work-through of indexes search
1	Long-range planning of administrative set-up between ERIC and RCU
1	How to get the user on his level
1	Opportunity for more states to report
1	Stimulation of interest in "on-going" projects
1	More detail
1	Costs in total programming of RCU system
1	More specific information and dates of future clearinghouse development

4. SOME IMMEDIATE NEEDS FOR RESEARCH DEVELOPMENT AND TRAINING TO IMPLEMENT THE CONCEPTS AND PURPOSES OF THE RESEARCH DISSEMINATION WORKSHOP.

No. of Responses	Items
6	Another meeting of this type geared more to specific problems in approximately 3 to 6 months
5	Program planning workshop on RCU dissemination - March
3	Conference or workshop within next 6 months on critical review of ERIC materials
2	Evaluation conference in one year
3	RCU personnel need time to apply what was learned at this meeting
4	Presentation to State Directors of Vocational Education
9	Need to have regional meetings for states (RCU's) with similar geographic and population distributions to discuss feasible approaches. (Synthesis of research suggested as focal topic)
2	Conference with instructional materials specialist to explain the use of AIM and how it fits into the system

1	A follow-up to this meeting, scheduled for Washington, to report progress and procedures and assist RCU's in changing local methods
1	Do not know
7	Conferences need to be held at state and local level (by RCU personnel)
1	A PERT analysis or organizational procedures could be useful, prepared by and mailed out from The Center
3	Two or three specific "menues" for implementing dissemination - specific suggestions
2	A specific training program or research seminar for vocational education supervisors, directors, guidance people, teachers
1	Course on "Techniques of Library Search and Bibliography Preparation"
1	Course on "Computer Utilization and Information Retrieval and Storage," with emphasis on use for RCU purposes
1	Course on "Library Organization and Departmental Function" - to include a description of inter-library loan processes and inter-library search
1	Course on "Basics of Proposal Writing and Preparation" for RCU teachers trainers and consultants
1	Course on technical writing
1	Course on "Availability of Federal Funds for Educational Programs" - and similar resources
1	Involve state supervisors below the state director level
1	Involve the teacher educators
1	Need individual searches
1	Development of state information systems
2	Financial support for acquiring related hardware
1	Dr. Taylor or staff member to present program to entire vocational-technical staff (2200) at University of Tennessee, June meeting
1	Schedule all seminars, conferences, etc., <u>far</u> in advance.

APPENDIX G

PRE-AVA CONVENTION
Information Seminar Program
December 2-3, 1967

VT-ERIC Clearinghouse
The Center for Vocational and
Technical Education
The Ohio State University
980 Kinnear Road
Columbus, Ohio 43212

American Institutes for Research
135 North Bellefield Avenue
Pittsburgh, Pennsylvania 15213

December 2, 1967

8:30	Registration	
9:00	Conference Overview	Dr. R. White Retrieval Specialist VT-ERIC Clearinghouse
9:15	Information Storage and Retrieval Systems	Dr. James Altman Director American Institutes for Research
11:45	Lunch	
1:00	Information Storage and Retrieval Systems	AIR Staff
1:30	The ERIC System and the VT Clearinghouse	Mrs. C. Wilson Coordinator VT-ERIC Clearinghouse
2:40	Break	
3:10	ERIC Products and Their Availability	Mrs. C. Wilson
4:10	Types of Materials in the VT Clearinghouse and the Acquisition Activities	Mr. C. Harris Acquisitions Specialist VT-ERIC Clearinghouse

December 3, 1967

8:45	Equipment and Facilities for Effective Use of the System	Dr. R. White
9:00	Abstracting and Descriptor Assignment	Mr. Harold Carr Document Analyst VT-ERIC Clearinghouse
9:25	Group Indexing Session	VT-ERIC Staff
10:00	Church and Lunch Break	
1:00	Search Procedures	Dr. R. White
1:55	The Users React to the System (Small Groups)	VT-ERIC Staff
2:50	Break	
3:15	General Discussion and Answer Period	Mrs. C. Wilson
3:30	Variations on Document Availability	Dr. R. White
3:45	A Look to the Future	Mrs. C. Wilson
4:00	Evaluation Opinionnaires	Participants
4:10	Summary	Mrs. C. Wilson

VT-ERIC Staff

Mrs. C. Wilson Coordinator	Dr. R. White Retrieval Specialist
Mr. C. Harris Acquisitions Specialist	Mr. Harold Carr Document Analyst
Mrs. E. Lovejoy Indexing-Abstracting Editor	Mr. Mal Miller Document Analyst

APPENDIX H

Roster of Participants for the Pre-AVA Information Accessibility Seminar December 2-3, 1967

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APPENDIX I

PRE-AVA CONVENTION
ERIC INFORMATION SEMINAR

December 2 and 3, 1967

REACTIONNAIRE

1. What features of the program did you find most helpful?

2. What elements of the program could have been deleted?

3. What additional items do you believe should have been included in the program?

4. What changes would you suggest for future programs of this type?

5. Specifically, what suggestions do you have for making this knowledge, or the available materials, more accessible to other persons in vocational and technical education?

11/67

APPENDIX J

Results of Participants Reactions to the Pre-AVA Convention ERIC Seminar December 2-3, 1967

Based on 24 Reactionnaires

1. What features of the program did you find most helpful?

No.	Reaction
8	Overall program was good.
2	Most items
4	Equipment displayed
3	Materials handed out
7	Good explanation of basic steps of the system
3	Concepts of information storage and retrieval systems operation
3	Small group sessions
2	Group indexing session
2	ERIC products and their availability
2	Overview of ERIC
1	How an individual can use the system
1	Altman's speech
1	ERIC editorial policy
1	Profession presentation by every speaker on program

2. What elements of the program could have been deleted?

No.	Reaction
14	None or no response
4	AIR, or comments relating to, too long or too theoretical
1	Shorten workshop indexing session
1	Some presentations could have been shortened
1	Shorten ordering procedures
1	Shorten abstracting procedures
1	Reading of the last (Knox) paper
1	EDRS change of address announcement

3. What additional items do you believe should have been included in the program?

No.	Reaction
8	Nothing or no response
1	More time to go through materials
3	Demonstration (case study) of materials followed through the system to an ultimate user
1	Step by step display of material processing
1	Pictures or movie of our facilities
2	More detail on actual clearinghouse operation
1	More information on ordering services
1	Theory on information storage and retrieval science
1	Written guidelines on materials to be sent to VT-ERIC
	More on:
1	Implication to research to use system language
2	Relationship to RCU
1	Ideas to strengthen local programs (RCU)
1	Statements of specific uses

4. What changes would you suggest for future programs of this type?

No.	Reaction
5	None or no response
1	More equipment displayed
1	More interpretative type literature for handouts
1	Handout on procedures and addresses for ordering
1	Prepared copies of speakers' comments
5	More small group time
1	Do not vary schedule
1	One-day session
2	Coffee served in group meetings; paid for by participants
1	Introduction of all participants
1	Involve more key people in each state
1	Attention of in-service needs of professionals
1	Less time for summary speech
1	A specific statement of exact usage to various groups in the first session.
1	Altman's presentation should follow afternoon program
1	Altman's presentation should have been illustrated
1	Develop routing patterns for input as well as output
1	More inspiration of staff

5. Specifically, what suggestions do you have for making this knowledge, or the available materials, more accessible to other persons in vocational and technical education?

No.	Reaction
2	None or no response
4	VT-ERIC representatives attend local or state meeting
2	An "instructor's kit" to be used in 2, 4, or 6 hour sessions, especially graduate seminars
1	Distribute a detailed handbook on use of the system
1	Brochure for national distribution from the U. S. Office
1	More leaflets, pamphlets, etc.
1	Formal, but elementary publication - to be used in "Teacher Education and Research"
1	Mailouts to vocational membership lists
1	Seminars by regions
1	Local seminars by RCU's
1	Similar program for the next AVA Convention
1	The RCU meeting, which was a necessity
2	Close cooperation between the Center and RCU's
1	Expansion of VT-ERIC OSU as wholesale agency
1	Make termatrex more available to states and subdivisions
1	Involve teacher education personnel in universities
1	Dissemination of information through State Department Research Divisions
1	Articles in state educational journals
1	More publicity through teacher organizations
1	User studies
1	Secure materials needed for departmental use
1	Contributions to ERIC system need to be recognized as "professional effort"
1	Commission persons to produce materials where information is lacking

APPENDIX K

Contributors to Center Activities and Projects

State Department of Education Leadership in Vocational Education: A Study of Its Current Status, Projected Needs, Evolving Role, and Recommendations for a Training Program

Mr. Mark Shibles, Associate Director, University Council for Educational Administration, The Ohio State University, Columbus, Ohio

The Problems and Meaning of Occupational Goal Development of Disadvantaged Junior High School Students

Dr. Frank Fletcher, Professor of Psychology, The Ohio State University, Columbus, Ohio

Dr. Samuel Osipow, Associate Professor of Psychology, The Ohio State University, Columbus, Ohio

Dr. George Thompson, Professor of Psychology, The Ohio State University, Columbus, Ohio

Dr. Robert Wherry, Chairman, Department of Psychology, The Ohio State University, Columbus, Ohio

A National Survey of the Training and Functions of Guidance Counselors in Vocational Education

Dr. James E. Bottoms, Associate State Director of Vocational Education, State Department of Education, Atlanta, Georgia

Dr. Ted Cote, Chairman, Department of Industrial Education, Temple University, Philadelphia, Pennsylvania

Dr. Frank Emsminger, Director of Middle Bucks Area Vocational-Technical School, Doylestown, Pennsylvania

Mr. Anthony Fantaci, Chief, Division of Youth Employment and Guidance Service, U. S. Department of Labor, Bureau of Employment Security, Washington, D. C.

Dr. Thomas L. Hilton, Senior Research Psychologist, Educational Testing Service, Princeton, New Jersey

Dr. Jacob J. Kaufman, Director and Professor of Economics, Institute for Human Resources, The Pennsylvania State University, University Park, Pennsylvania

Dr. John G. Odgers, Director, Division of Guidance and Testing, State Department of Education, Columbus, Ohio

Dr. David H. Pritchard, Vocational Guidance Specialist, Division of Vocational and Technical Education, U. S. Office of Education, Washington, D. C.

Mr. John E. Saare, Director of Vocational Education, Jacksonville, Florida

Miss Alice Y. Scates, Director, Basic Studies Branch, Division of Comprehensive and Vocational Education Research, Department of Health, Education and Welfare, U. S. Office of Education, Washington, D. C.

Dr. Frank Sievers, Specialist, Pupil Personnel Services, Bureau of Elementary and Secondary Education, U. S. Office of Education, Washington, D. C.

Dr. David V. Tiedeman, Professor of Education, Harvard University, Graduate School of Education, Cambridge, Massachusetts

Dr. Donald Twiford, Chief of Pupil Personnel Services, Bureau of Elementary and Secondary Education, U. S. Office of Education, Washington, D. C.

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AVA Pre-session: Research Training Seminar

Dr. Everett D. Edington, Coordinator, Research Coordinating Unit, Vocational Education, Department of Education, Sacramento, California.

Dr. Gene V. Glass, College of Education, University of Colorado, Boulder, Colorado

Dr. J. Thomas Hastings, Director, Center for Instructional Research and Curriculum Evaluation, University of Illinois, Urbana, Illinois

Dr. Leonard Marascuilo, Assistant Professor of Education, University of California, Berkeley, California

Dr. Lloyd J. Phipps, Professor, Vocational and Technical Education, University of Illinois, Urbana, Illinois

Dr. David J. Pucel, Department of Industrial Education, Minnesota Research Coordinating Unit, University of Minnesota, Minneapolis, Minnesota

Dr. Douglas Sjogren, Director, Occupational Research Center, Colorado State University, Fort Collins, Colorado

Dr. James S. Terwiliger, Department of Educational Psychology, University of Minnesota, Minneapolis, Minnesota

National Program Development Institutes in Technical Education

Joseph P. Arnold, Associate Professor, Department of Vocational and Practical Arts Education, The University of Michigan, Ann Arbor

Roy W. Dugger, Vice President, Texas A & M University and Director of James Connally Technical Institute, Waco

APPENDIX L

Consulting Specialists

State Department of Education Leadership in Vocational Education: A Study of Its Current Status, Projected Needs, Evolving Role, and Recommendations for a Training Program

Dr. Jack Culbertson, Director, University Council for Educational Administration, The Ohio State University, Columbus, Ohio

The Modification of the Perceptions Held by Disadvantaged Youth Toward Office Work

Mr. Stanley B. Cohen, Vice Principal, BOK Area Vocational and Technical School, Philadelphia, Pennsylvania

Mr. John Kushner, Director of Business Education, Detroit Public Schools, Detroit, Michigan

Mr. James McKee, Teacher, Northern High School, Detroit, Michigan

Mrs. Celestine Mongo, Head, Department of Business, Central High School, Detroit, Michigan

Dr. Estelle L. Popham, Professor, Department of Business Education, Hunter College, City University of New York, New York, New York

Miss Rosalind Sanders, Teacher, West Philadelphia High School, Philadelphia, Pennsylvania

Dr. Robert A. Schultheis, Professor, College of Education, Temple University, Philadelphia, Pennsylvania

Mr. Alvin Vaughn, Teacher, West Philadelphia High School, Philadelphia, Pennsylvania

Dr. William L. Winnett, Professor, School of Business, San Francisco State College, San Francisco, California

New Office and Business Education Learnings System

Mrs. Mary Louise Baker, Editorial Consultant, Pioneer Press, Columbus, Ohio

Dr. Charles B. Hicks, Professor of Business Organization, College of Commerce, The Ohio State University, Columbus, Ohio

Development of Facility Planning Guides for Vocational and Technical Education Facilities

Dr. M. J. Conrad, Professor of Education, The Ohio State University, Columbus, Ohio

AVA Pre-session: Research Training Seminar

Dr. Virgil E. Christensen, Professor, Department of Psychology, Texas A & M University, College Station, Texas

Dr. Jerome Moss, Professor of Industrial Education, University of Minnesota, Minneapolis, Minnesota

APPENDIX M

Institutional Participants in Center Projects

Technical Education Institutes

Mississippi State University (E. F. Mitchell, E. B. Moore)

Utah State University (Neill C. Slack)

The University of California at Los Angeles (UCLA)
(R. S. Nelson, M. L. Barlow)

The University of Connecticut (W. H. Martin, L. Lombardi)

Modifications of the Perceptions Held by Disadvantaged Youth Toward Office Work

Detroit, Michigan Public Schools (Celestine Mongo)

Hunter College of The City University of New York (Estelle Popham)

Laredo, Texas Public Schools (Maya Guerra)

Philadelphia, Pennsylvania Public Schools (Alvin Vaughn)

San Francisco State College (William L. Winnett)

Temple University (Robert A. Schultheis)

New Office and Business Education Learnings System

University of Michigan (Frank Lanham)

Wayne State University (Fred Cook)

The Transition from School to Work: Worker Adjustment

Louisiana State University in New Orleans (Jerome Salamone)

Virginia Polytechnic Institute (John A. Ballwag)

The Development of a Model to Evaluate State Programs of Vocational and Technical Education

Colorado State Board for Vocational Education (Joe Bailey)

Kentucky State Department of Education (Charles Gibson)

New Jersey State Department of Education (Frank Pinkowski)

Individualizing Instructional Materials

Southern Illinois University (Tom Stitt)

Texas A & M University (Foy Page, John Holcomb)

University of Arkansas (Lamar Love)

University of Kentucky (George Luster)

APPENDIX N

Articles and Papers Prepared by Center Staff Members

Cotrell, C. J. Applications of Education Technology in Vocational Programs. American Vocational Journal, 1968, 43 (1), 21-23, 32.

Huffman, Harry. Assessment of Classroom Activities. Methods of Teaching Bookkeeping. Eastern Business Teachers Association, 1967.

Huffman, H., Tonne, H. A., Bangs, F. K., and Tate, D. J. Business Education. Curriculum Handbook for School Administrators. American Association of School Administrators, 1967. Pp. 21-46.

Miller, A.J. Characteristics of the Technical Education Student. Technical Education Yearbook 1967-1968. Prakken Publications, Inc. Ann Arbor, Michigan, 1967. Pp 189-193.

Starr, H. A Model for Evaluating State Programs. American Vocational Journal, 1967, 42 (9), 13-14.

White, Robert H. & Woodin, Ralph J. The Education of Ornamental Horticulture Technicians in Ohio. Columbus: The Ohio State University, September, 1967.

APPENDIX O

Major Presentations to Professional Groups by Center Staff Members

Campbell, Robert E.

"The Use of Computers as an Adjunct to Counseling." Presented at the All Ohio Conference of College and University Counseling Center Directors. Ohio State University, Columbus, November, 1967.

Cotrell, C. J.

"Industrial Arts, Technical, and Trade and Industrial Education - Research, Leadership Development, and Information Retrieval." Paper presented to the National Association of Industrial Teacher Educators during the meeting of the American Vocational Association, Cleveland, December, 1967.

"Trade and Industrial and Technical Education - Research, Leadership Development, and Information Retrieval." Paper presented to the National Association of State Supervisors of Trade and Industrial Education during the meeting of the American Vocational Association, Cleveland, December, 1967.

Huffman, Harry

Chaired the research meeting of the business education section of The American Vocational Association, Cleveland, December, 1967.

"Evaluation of Business Education Programs for Disadvantaged Youth." Paper presented at North Central Business Education Association, Minneapolis, Minnesota, December, 1967.

Lee, Sylvia L.

"Trends and Social Aspects Affecting Patterns of Learning for Girls and Women." Paper presented at T & I Womens Section, American Vocational Association, Cleveland, December, 1967.

Lovejoy, Eunice

"ERIC Projects and Programs." Talk given at the Ohio Association of School Librarians and Educational Media Council of Ohio, Cincinnati, October 26, 1967. (4 presentations)

Meckley, R. F.

"The Center for Vocational and Technical Education: Overview." Presentation to Phi Delta Kappa, Ohio State University, January, 1968.

Miller, A. J.

"Vocational and Technical Education." Paper presented at the meeting of The Ohio School Board Association, Columbus, November, 1967.

"ERIC - A National Information Retrieval and Dissemination System." Paper presented at The Third Indiana Manpower Research Conference, Bloomington, Indiana, November, 1967.

Morrison, E. J.

"Practical Hints for Writing Research Proposals." Paper presented at Statewide Vocational Education Conference for Supervisors and Teacher Educators in Ohio, Columbus, November, 1967.

Rice, Dick C.

"The Problems of Attracting and Retaining Qualified Personnel in State Divisions of Vocational Education." Paper presented at the meeting of the American Vocational Association, Cleveland, December, 1967.

"But What About the Improvement of Learning." Presentation at the meeting of the North Central Ohio Teachers' Association, Ashland, October, 1967.

Taylor, Robert E.

"ERIC Program for Vocational-Technical Education." North Central Regional Conference, Occupational Education Project, American Association of Junior Colleges, Denver, November, 1967.

"Report on The Center for Vocational and Technical Education," Statewide Vocational Education Conference for Supervisors and Teacher Educators in Ohio, Columbus, November, 1967.

"Report on The Center for Vocational and Technical Education," Meeting of State Directors of Vocational Education, American Vocational Association, Cleveland, December, 1967.

"Report on The Center for Vocational and Technical Education," Meeting of AVA Board of Directors, American Vocational Association, Cleveland, December, 1967.

Vivian, Neal E.

"The Role of The Center for Vocational-Technical Education in the Dissemination of Instructional Materials." Paper presented at the Indiana State Teachers Association Meeting, Indianapolis, October, 1967.

"AIM, ARM and ERIC: Their Contributions to Program Development in Post-Secondary Distributive Education." Paper presented at Post-Secondary Distributive Education Conference, Western Michigan University, Kalamazoo, November, 1967.

"Appraisal of High School Programs in D. E." Paper presented at North Central Business Education Association, Minneapolis, December, 1967.

Wilson, C. I.

"The ERIC System." Talk given at the Graduate School of Library Science Colloquium, Case-Western Reserve University, Cleveland, December 6, 1967.